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WAL	AA	4,601,859	07/22/86	Galle et al.	558	459		
WAL	AB	5,431,855	7/11/95	Green	252	373	_	
WAL	AC	5,447,705	9/5/95	Petit	423	418.2		
WAL	AD	5,500,149	3/19/96	Green	252	373		
WAL	AE	5,510,056	4/23/96	Jacobs	252	373		
WAL	AF	5,648,582	7/15/97	Schmidt	585	652		
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WAL	АН	5,023,276	6/11/91	Yarrington	514	703		
OREIGN PAT	TENT DOCUM	ENTS						
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	Translati	
WAL	Al	WO9301130	1/21/93	PCT	C01B	31/18	YES	NO
WAL	AJ AJ	WO9301130 EP0303438	1/21/93	PCT EPO	C01B	31/18	YES	NO
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Sheet 2 of 3 Atty. Docket No. Serial No. 1856-23101 10/747,718 (449 (Modified)(CONTINUED) (9595.0-01)INFORMATION DISCLOSURE STATEMENT BY APPLICANT Applicant (Use several sheets if necessary) Rafael L. Espinoza et al. Filing Date December 29, 2003 1755 REFERENCE DESIGNATION U.S. PATENT DOCUMENTS **EXAMINER** DOCUMENT DATE NAME **CLASS** SUB-FILING DATE IF NUMBER APPROPRIATE INITIAL **CLASS** ΑV 10/12/93 518 5,252,613 Chang et al. 700 5,382,748 01/17/95 585 899 ΑW Behrmann et al. 5,348,982 09/20/94 ΑX Herbolzheimer et al. 518 700 5,827,902 518 706 Maretto et al. AY 10/27/98 ΑZ 5,961,933 10/05/99 Casanave et al. 422 211 6,060,524 05/09/00 Casanave et al. 518 706 BA 6,156,809 12/05/00 Clark et al. 518 BB 719 01/02/01 BC 6,169,120 Beer 518 715 6,403,660 B1 06/11/02 518 700 BD Espinoza et al. 2003/0096881 05/22/03 Minkkinen et al. 518 728 BE FOREIGN PATENT DOCUMENTS DOCUMENT DATE COUNTRY **CLASS** SUR-Translation NUMBER **CLASS** YES NO WO96/16737 BF 6/6/96 **PCT** B01J 37/02 WO99/48805 9/30/99 BG PCT C01B 3/40 ВН 0640561 3/1/95 EP C01B 3/40 ΒĬ 0333037 9/20/89 ΕP C01B 3/40 BJ 0974551 1/26/00 EP C01B 3/40 BK WO 99/37580 07/29/99 C01B 3/40 PCT BL 0 558 343 A1 01.09.93 ART (Including Author, Title, Date, Pertinent Pages, Etc.) BM (PCT) Results of Partial International Search BN European Search Report, EP 01 97 0632 dated August 14, 2003, 2 pages S. Bernal et al., "Influence of the preparation procedure on the chemical and microstructural properties of BO lanthana promoted Rh/SiO2 catalysts A FTIR spectroscopic study of chemisorbed CO", Journal of Alloys and Compounds 250 (1997) 461-466, (40 month Michael F. Mark et al., "CO2-Reforming of Methane on Supported Rh and Ir Catalysts", Journal of Catalysis 164 BP (1996) 122-130 。 Cho month Qian-Gu Yan et al., "Promoting Effect of Rare Earth Oxides On Ni/Re_xO_y-Al₂O₃ Catalyst for Partial Oxidation of BO Methane to Synthesis Gas", Journal of Natural Gas Chemistry, Vol. 6, No. 2 (1997) 93-100, Was May 11 V.R. Choudhary et al., "Oxidative Conversion of Methane to Syngas over Nickel Supported on Commercial Low

EXAMINER: Initial if reference considered, whether or policitation is in conformance with MPEP §609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

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WAL	BU	6,365,544	04/02/02	Herron et al.		502	326		
WAL	BV	6,368,997	04/09/02	Herron et al.		502	302		
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WAL	вх	WO01/00595	04.01.01	WIPO		C07D	249/12	11.0	
OTHER ART (I	ncluding Auth	or, Title, Date, Pert	inent Pages,	Etc.)					
	ВҮ	Article entitled:	"Hydrodynd I.B. Jackson	amic characterization of sleet al, Advanced Energy Te). 1226-
WAL	BZ	Article entitled:	"Non-isoba	ric bubble columns with vo					
WAL	CA	Article entitled:	"Analysis o	f the design of bubble-colunical Society, pp. 1213-121	mn reactors for F	ischer-Tro	psch synthe	sis," by Da	vid
WAL	СВ	Article entitled:	"Bubble co	lumn reactors and Fischer				- Sci. Eng.,	37(2),
INC	СС	Article entitled:	"Gas holdu	p in slurry bubble columns ChE. Journal, Vol. 43, No.	s: effect of column	diameter d	and slurry c	oncentratio	ons," by
WAL	CD	Article entitled:	"Fundamen	tals and selection of advantals, pp. 55-70, 1999.	gced Fischer-Trop	sch redicto	rs," by S.T.	Sie et al.,	Elsevier,
WAL	CE	Article entitled:	"Dynamic s	imulation of bubbly flow i	n bubble columns,	"by Y. Pa			
WAL	CF	Article entitled:	"Numerical	2481-2489, 1999. [14] is simulation of gas-liquid a emical Engineering Science	ynamics in cylind	rical bubbi 83, 1999	le golumn re	actors," by	Jayanta
WAL	CG	Article entitled: H.M. Letzel et a	"Gas holdu I., Pergamo	p and mass transfer in bub n. Chemical Engineering S	ble column reacto	ors operate 37-2246, 1	d at elevate 999. I HO	d pressure,	ゼルノ
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Approved for use through 07/31/2006. OMB 0651-0031
U. S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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Substitu	Substitute for form 1449A/PTO				Complete if Known
TRITT		DTO.	T OCTIVE	Application Number	10/747,718
	ORMATION 1			Filing Date	December 29, 2003
STATEMENT BY APPLICANT				First Named Inventor	Rafael L. Espinoza et al
				Group Art Unit	1754
(use as many sheets as necessary)				Examiner Name	Cam N Nouven Lay ar
Sheet	1	of	2	Attorney Docket Number	1856-23101 (9595.0-01)

			U.S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
WAL	AA	US-3931050	01-06-1976	Asano et al	
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	FOREIGN PATENT DOCUMENTS									
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ³ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T				
WAL	BA	GB-2 310 384 A	08-27-1997	Chinese Petroleum Co.						
WAL	BB	GB-1 283 737 A	08-02-1972	National Distillers & Chemical Corp.						

Examiner			Date	
Signature	War no By Fan	sel	Considered	9-3-86
	1/1/2001			

EXAMINER: Initial reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St.16 if possible. 6 Applicant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual ease. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P. O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORM TO THIS ADDRESS. Send To Commissioner For Patents, P. O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08b (07-05)

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE ond to a collection of information unless it contains a valid OMB control number.

	Substitute for form 1449R/PTO			Comp	olete if Known
Substitute for	form 1449B/PTO		- OCA	Application Number	10/747,718
INF	ORMATION I	DISC	LOSURE	Filing Date	December 29, 2003
STATEMENT BY APPLICANT			LICANT	First Named Inventor	Rafael L. Espinoza et al
				Group Art Unit	1754
(use as many sheets as necessary)			cessary)	Examiner Name	Companyor Lange
Sheet	2	of	2	Attorney Docket Number	1856-23101 (9595.0-01)

		OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate) title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issued number(s), publisher, city and/or country where published.	T ²
WAL	CA	HOHN, K.L. & SCHMIDT, L.D. 'Partial oxidation of methane to syngas at high space velocities over Rh-coated spheres' Applied Catalysis A: General, Volume 211, Issue 1, Pages 53-68 (March 2001)	
WAL	СВ	E. PELUSO ET AL 'Eggshell catalyst in Fischer-Tropsch synthesis: Intrinsic reaction kinetics' Chemical Engineering Science, Volume 56, Issue 4, Pages 1239-1245 (February 2001)	
WAL WAL WAL	СС	CHANG, J-R & CHENG, C-H 'Catalytic Properties of Eggshell Pd/b-Al ₂ O ₃ Catalysts for Isoprene-Selective Hydrogenation: Effects of Water Poisoning' Industrial & Engineering Chemistry Research; volume 36, issue 10, Pages 4094 – 4099 (1997)	
WAL	CD	IGLESIA, E. ET AL 'Synthesis and Catalytic Properties of Eggshell Cobalt Catalysts for the Fischer-Tropsch Synthesis' Journal of Catalysis, Volume 153, Issue 1, Pages 1-196 (April 1995)	

Examiner Signature	Wayne a Fansel	Dated Considered	8-3-26

^{*}EXAMINER: Initial reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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